

Title (en)

Method and arrangement for separating water and particular material from heavy fuel oil

Title (de)

Verfahren und Vorrichtung zum Trennen von Wasser und Feststoffen aus Schweröl

Title (fr)

Procédé et dispositif pour séparer l'eau et les particules de fioul lourd

Publication

EP 2181744 A1 20100505 (EN)

Application

EP 08167798 A 20081029

Priority

EP 08167798 A 20081029

Abstract (en)

The invention relates to a method and an arrangement for separating particular material and/or water from heavy oil. An input flow of heavy oil comprising particular material and/or water is introduced to a first centrifugal separator, where heavy oil is separated from water and particles. Heavy oil is led out of the first centrifugal separator (6) as a primary output flow (10) and water (13) and/or particular material (11) is led out of the first centrifugal separator (6) as a secondary output flow(s). According to the invention the heavy oil comprising particular material and/or water is introduced to the first centrifugal separator at a density that is higher than density of the water at that temperature.

IPC 8 full level

B01D 21/26 (2006.01); **B01D 17/02** (2006.01); **B04B 5/10** (2006.01); **C10G 33/06** (2006.01); **C10M 175/00** (2006.01)

CPC (source: EP)

B01D 17/0217 (2013.01); **B01D 17/041** (2013.01); **B01D 17/047** (2013.01); **B01D 21/262** (2013.01); **B04B 5/10** (2013.01); **B04B 11/02** (2013.01); **C10G 31/10** (2013.01); **C10M 175/0058** (2013.01)

Citation (search report)

- [X] US 3344982 A 19671003 - TODD DAVID B
- [X] US 1741756 A 19291231 - CLARK LEE H
- [XY] US 4411645 A 19831025 - TENTHOFF ALOYS [DE]
- [Y] US 5919353 A 19990706 - ITOU HIDENOBU [JP], et al
- [A] US 3047214 A 19620731 - DOWNING FRANCIS P
- [Y] US 3878090 A 19750415 - REDFORD DAVID ARTHUR
- [A] US 6787027 B1 20040907 - VAN DEN BERG FRANCISCUS GONDUL [NL], et al
- [A] US 4990265 A 19910205 - TENTHOFF ALOYS [DE]
- [A] "CENTRIFUGAL SEPARATORS FOR TREATMENT OF FUTURE HEAVY FUEL OILS", SHIPBUILDING & MARINE ENGINEERING INTERNATIONAL, vol. 102, no. 1261, 1982, pages 377 - 382, XP009113642

Cited by

WO2016028214A1; EP3906984A1; CN109661260A; KR20150093765A; CN105051160A; FR3075656A1; CN103154202A; EP3183064A4; EP3290093A1; CN109641162A; KR20210037732A; US11511214B2; US11130075B2; WO2021224111A1; WO2018046275A1; WO2017196234A1; US11958004B2; WO2012015666A2; US8747658B2; WO2012015666A3; WO2024104552A1; TWI750791B; EP2928988B1; US10486169B2; EP3885050B1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 2181744 A1 20100505

DOCDB simple family (application)

EP 08167798 A 20081029